Clariant Corporation

4000 Monroe Road Charlotte, NC 28205 704.331.7000



Erin Russell Writer's Direct Dial No.: 704/331-7059 Fax No.: 704/331-7131 E-Mail: erin.russell@clariant.com

April 20, 2007

BY US POSTAL SERVICE EXPRESS MAIL

EPA – Region I P.O. Box 360197M Pittsburgh, PA 15251

Re: Clariant Corporation, Docket No. TSCA-01-2007-0058

Dear Staff Member:

Please find enclosed the check in the amount of \$211, 200 in final settlement of the above-referenced matter.

Very truly yours,

Erin Russell

Assistant General Counsel

Enclosure

c: Regional Hearing Clerk (by US Mail)

Thomas T Olivier, Senior Enforcement Counsel (by US Mail)

221964663

AN INDEMNITY AND/OR SURETY BOND MAY BE REQUIRED PRIOR TO REPLACEMENT OR REFUND OF THIS CHECK IF LOST OR DESTROYED

04/18/2007

WACHOVIA

Pay To The Order Of

Treasurer, United States of America

\$211,200.00

TWO HUNDRED ELEVEN THOUSAND TWO HUNDRED

Dollars Security Feetures Details on Back.

Claffant Corporation

Remitter
Issued by Integrated Payment Systems Inc., Englewood, Colorado
JPMorpan Chase Bank, N.A., Denver, Colorado

DRAWER: Wachovia Bank, National Association

Authorized Signature

"350927" 1:1020009791: 68002219646636"



Erin.Russell@clariant.com 07/27/2005 02:30 PM

To Tom Olivier/R1/USEPA/US@EPA

CC

bcc

Subject Your phone message

Tom - I received your phone message when I returned to town this week. I'm checking on your questions. I will get back to you with an answer by early next week. Let me know if there's a problem with that timeframe. Best regards - Erin

Erin Russell Assistant General Counsel Clariant Corporation 4000 Monroe Road Charlotte NC 28205

704-331-7059 erin.russell@clariant.com

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Erin.Russell@clariant.com 07/27/2005 02:30 PM

To Tom Olivier/R1/USEPA/US@EPA

CC

bcc

Subject Your phone message

Tom - I received your phone message when I returned to town this week. I'm checking on your questions. I will get back to you with an answer by early next week. Let me know if there's a problem with that timeframe. Best regards - Erin

Erin Russell
Assistant General Counsel
Clariant Corporation
4000 Monroe Road
Charlotte NC 28205

704-331-7059 erin.russell@clariant.com

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Constantinos Loukeris/R5/USEPA/US 07/29/2005 03:39 PM To Tom Olivier/R1/USEPA/US@EPA

cc Deboraha Carlson/R5/USEPA/US@EPA

bcc

Subject BMS CFC Case

History:

This message has been forwarded.

Tom,

Here are several of documents that should be helpful to understand the history and timeline of events for Bristol Myer Squibb. I am also faxing the self disclosed violations for the Region 1 facilities, that will appear in the letter referral (core and satellite for Region 1) we are drafting to DOJ. If you have any questions, feel free to contact myself or Deborah Carlson, Office of Regional Counsel. [312-353-6121]



BMS CFC SUmmary.doc

This is the letter that in which we made a counteroffer to BMS:



BMS letter.rtf

Thank You

Constantinos Loukeris, Environmental Engineer Air Enforcement and Compliance Assurance Section (MI/WI)

Phone: (312) 353-6198 Fax: (312) 353-8289 Tom Olivier/R1/USEPA/US 07/22/2005 09:14 AM To Kimberly Tisa/R1/USEPA/US, marianne milette

CC

bcc

Subject Clariant - Mexico (Minor Update)

I left a detailed message for Erin Russell on the Mexico shipment issues - I'll let you know her response.

T.

Tom Olivier/R1/USEPA/US

07/22/2005 02:44 PM

To "Meade, Kenneth" < Kenneth. Meade@wilmerhale.com>

CC

bcc

Subject Re: Wal-Mart

Ken, thank you for the update.

I plan on sending you a redraft of the Consent Agreement early next week (I believe the last version was from March 25). That will give us something to focus on as we finalize this agreement.

Tom

"Meade, Kenneth" < Kenneth. Meade@wilmerhale.com>



"Meade, Kenneth" <Kenneth.Meade@wilmerhal e.com>

To Tom Olivier/R1/USEPA/US@EPA

CC

07/20/2005 09:41 AM

Subject Wal-Mart

Tom -- I am still trying to get the W-M folks to produce the information that we discussed -- it has been very difficult as they are all on different travel schedules, but I will keep pressing them to get whatever they can to me. I will let you know as soon as I have made progress.

Best regards.

Ken Meade

Kenneth R. Meade Wilmer Cutler Pickering Hale and Dorr LLP 1455 Pennsylvania Avenue, N.W. Washington, DC 20004

Tel: 202-942-8431 Fax: 202-942-8484

ken.meade@wilmerhale.com

This email message and any attachments are confidential and may be privileged. If you are not the intended recipient, please notify Wilmer Cutler Pickering Hale and Dorr LLP immediately — by replying to this message or by sending an email to postmaster@wilmerhale.com — and destroy all copies of this message and any attachments without reading or disclosing their contents. Thank you.

For more information about Wilmer Cutler Pickering Hale and Dorr LLP, please visit us at http://www.wilmerhale.com.

Clariant Corporation

4000 Monroe Road Charlotte, NC 28205 704.331,7000



Erin Russell Writer's Direct Dial No.: 704/331-7059 Fax No.: 704/331-7131 E-Mail: erin.russell@clariant.com

March 19, 2007

VIA FEDERAL EXPRESS

Thomas T. Olivier Senior Enforcement Counsel EPA New England, Region 1 1 Congress Street, Suite 1100 (SEL) Boston MA 02114-2023

Re: Docket No. TSCA-01-2007-0058

Clariant Corporation Consent Order

Dear Tom:

Please find enclosed two signed copies of the Consent Order and Final Order in the above referenced case. We look forward to receiving a final signed copy of this once executed by EPA and the Regional Judicial Officer. In the meanwhile, please let me know if you need anything further on this matter.

Best regards,

Erin Russell

Enclosure

c: Mike Teague John Paul Chris Barnard

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BEFORE THE ADMINISTRATOR

In the Matter of:)	Docket No. TSCA-01-2007-0058
CLARIANT CORPORATION)	
)	CONSENT AGREEMENT
)	AND FINAL ORDER
Respondent)	
)	
)	

The United States Environmental Protection Agency, Region I ("EPA") issues this Consent Agreement and Final Order to assesses penalties for violations of Section 6(e) of the Toxic Substances Control Act ("TSCA"), 15 U.S.C. §2605(e), involving the manufacture, distribution in commerce, and export of polychlorinated biphenyls ("PCBs").

CONSENT AGREEMENT

The EPA issued Clariant Corporation a Complaint and Notice of Opportunity for Hearing in February 2007. The EPA and Respondent Clariant Corporation ("Clariant" or "Respondent") agree that settlement of this matter is in the public interest, and that entry of this Consent Agreement and Final Order without further litigation is the most appropriate means of resolving this matter.

Therefore, before taking any testimony, upon the pleadings, without adjudication of any issue of fact or law, and upon consent and agreement of the parties, it is hereby ordered and adjudged as follows:

I. PRELIMINARY STATEMENT

- A. Under Section 16(a) of the Toxic Substances Control Act, 15 U.S.C. § 2615(a), and the Civil Monetary Penalty Inflation Rule (see Pub. L. 104-134 and 40 C.F.R. Part 19), EPA may assess penalties of up to \$ 27,500 for each day of violation of TSCA after January 30, 1997, and before March 15, 2004.
- B. The provisions of this Consent Agreement and Final Order shall apply to and be binding on EPA and on Respondent, its officers, directors, successors and assigns.
- C. Respondent stipulates that EPA has jurisdiction over the subject matter alleged in the Complaint. Respondent waives any defenses it might have as to jurisdiction and venue. Respondent neither admits nor denies the specific allegations of the Complaint, and consents to the terms of this Consent Agreement and Final Order.
- D. Respondent hereby waives its right to request a judicial or administrative hearing on any issue of law or fact set forth in the Complaint. Respondent hereby waives any right to appeal the Final Order accompanying this Consent Agreement.

II. TERMS OF SETTLEMENT

A. Clariant has conducted an evaluation of the risks associated with the use of products that were inadvertently manufactured and sold using PCB-contaminated pigments. The risk evaluation supports the conclusion that there is no unacceptable risk to end users of the products examined, and that product recalls are not necessary to protect human health or the environment.

3

Clariant Corporation represents that it is manufacturing pigments and distributing pigments in

commerce in accordance with the PCB regulations at 40 C.F.R. §761.20.

B. After discovery of the pigment with elevated levels of PCBs, Clariant took

steps to mitigate the problem. When possible, Clariant recovered pigment and products for

proper disposal. All remaining Clariant inventories were sent to an appropriate disposal facility.

C. Clariant voluntarily disclosed the violations described in the Complaint to EPA. In light

of the above, and taking into account such other circumstances as justice may require, EPA has

determined that it is fair and proper to assess a civil penalty for the violations alleged in the

Complaint in the amount of \$ 211,200.

D. Respondent shall pay the penalty of \$ 211,200 within 30 days of the date this Consent

Agreement and Final Order is signed by the Regional Judicial Officer.

E. Respondent shall make payment by submitting a check, to the order of the "Treasurer,

United States of America," in the required amount to:

EPA -- Region I

P.O. Box 360197M

Pittsburgh, PA 15251

Respondent shall note the case name and docket number of this action on the check and in an

accompanying cover letter, and shall provide copies of the check and letter to:

Regional Hearing Clerk

U.S. Environmental Protection

Agency, Region I

Suite 1100, Mail Code RCH

One Congress Street

Boston, MA 02114-2023

and to Thomas T. Olivier
Senior Enforcement Counsel
U.S. Environmental Protection
Agency, Region I
Suite 1100, Mail Code SEL
One Congress Street
Boston, MA 02114-2023

- F Pursuant to Section 16 of TSCA, 15 U.S.C. § 2615, and 31 U.S.C. § 3717, EPA is entitled to assess interest and penalties on debts owed to the United States and to assess a charge to cover the cost of processing and handling a delinquent claim. Interest will therefore begin to accrue on the civil penalty if it is not paid within 30 calendar days of the entry of the Consent Agreement and Final Order. Interest will be assessed in accordance with 31 C.F.R. § 901.9(b). In addition, a penalty charge of six percent per year and an amount to cover the costs of collection will be assessed on any portion of the debt which remains delinquent more than ninety (90) days after payment is due. Should assessment of the penalty charge on the debt be required, it will be assessed as of the first day payment is due, under 31 C.F.R. § 901.9(d).
- G. The civil penalty under paragraph II.C above, and any interest, non-payment penalties and charges as described in paragraph II.F above, shall represent penalties assessed by EPA and shall not be deductible for purposes of Federal taxes.
- H. This Consent Agreement and Final Order constitutes a settlement by EPA of all claims for civil penalties pursuant to Section 16(a) of TSCA for the violations alleged in the Complaint. Compliance with this Consent Agreement and Final Order shall not be a defense to any other actions subsequently commenced pursuant to Federal laws and regulations administered by EPA,

and it is the responsibility of Respondent to comply with said laws and regulations. EPA reserves all its other criminal and civil enforcement authorities, including the authority to seek injunctive relief and the authority to address imminent hazards.

- I. The parties shall bear their own costs and fees in this action.
- J. Each undersigned representative of the Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Agreement and to execute and legally bind Respondent to it.

For Respondent:

Christopher Barnard

Senior Vice President, Legal Secretary & General Counsel

Clariant Corporation

For Complainant:	
	Date:
Deborah Brown	
Manager, Enforcement Unit	
Office of Environmental Stewardsh	nip
U.S.Environmental Protection	
Agency, Region I	
	Date:
Thomas T. Olivier	
Senior Enforcement Counsel	
U.S. Environmental Protection	
Agency, Region I	

III. FINAL ORDER

Agency, Region I

The foregoing Consent Agreement is hereby approved and incorporated by reference into
this Final Order. The Respondent is ordered to comply with the terms of the above Consent
Agreement, effective immediately.

	Date:
Sharon Wells	
Regional Judicial Officer	
U.S. Environmental Protection	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Receipt No: 7002 0860 0000 6598 0836

September 29, 2005

John Paul, ESHA Manager Clariant Corporation 500 Washington Street Coventry, Rhode Island 02816

Re: Application for Re-Processing of PCB-Contaminated Pigments

Dear Mr. Paul:

This is in response to the Clariant Corporation (Clariant) Application to Rework PCB-Contaminated Pigment Product, dated June 27, 2005 and received by EPA on July 7, 2005 (Application). This Application was submitted by Clariant to support its process for the reprocessing of contaminated pigments containing PCBs greater than 50 parts per million (> 50 ppm) which were inadvertently generated during manufacturing.

EPA has reviewed the Application and provides the following comments.

- 1. The title page contains the designation "Attorney-Client Privilege Confidential Business Information"; Section 1 inventory page contains the designation "TSCA Confidential Information". It is unclear if Clariant is claiming this Application as TSCA Confidential Business Information (CBI) or is claiming just CBI. For any submittal that is claimed TSCA CBI, you must clearly identify the portions that are claimed TSCA CBI, include two sanitized versions and address the submittal to the Document Control Officer (Rosina Toscano, mailcode SEP) directly. Please be aware that a claim of TSCA CBI for certain portions of the Application may be problematic, especially for evaluation of analytical methodology. Accordingly, Clariant may wish to consider claiming certain portions (such as inventory) TSCA CBI, and the remainder as CBI under 40 CFR Section 2.203b. If you wish to claim some or all of the information you submit as CBI, you must follow the procedures described in EPA's regulations at 40 C.F.R. Part 2, Subpart B.
- 2. Clariant has provided insufficient information for EPA's evaluation of the process design. Section 5 contains a simplified process flow chart procedure for reworking the contaminated pigments. However, EPA finds the procedure difficult to follow and is unable in many cases to find the steps referenced in the procedure. It would be helpful if Clariant could provide a schematic of the system design.

- 3. Flow Diagram, Section 5. There are 2 pathways for solvent recovery; one pathway indicates PCB contaminated solvent and the other pathway shows clean solvent.
 - a. For the 1st pathway, it appears that this is the pathway for the distilled PCBs from the slurry solution. It is unclear what the distillation temperature is and if it is satisfactory for the PCB congeners of interest.
 - b. The second pathway indicates clean solvent, which may be a misnomer. In the procedure, there appears to be a PCB maximum limit for the clean solvent of 3 ppm. If so, the solvent is not technically "clean" as is inferred in the diagram.
- 4. The analytical method (Section 6) for the proposed project is Clariant Method GC001.
 - a. EPA cannot fully evaluate this method as the GC001-Addendum 1 for standard preparation was not included in the Application.
 - b. Step 5.4.1.2, last paragraph. The step refers to addition of anhydrous sodium sulfate for removal of sulfuric acid. Please note that this explanation is slightly misleading. The sodium sulfate will remove water from the solution. Since the water contains the sulfuric acid, it will be removed with the water.
 - c. The method proposes GC calibration using 3 tetrachlorobiphenyl (TCB) standards: The only data presented in the Application reported the PCBs as "total PCBs" and did not include the specific congeners identified. As such, EPA can make no determination on the adequacy of the selected calibration standards.
 - d. The method contained no information on calibration procedures or on data quality and method evaluation.
- 5. Page 3 of the narrative (schedule discussion) refers to reworking of pigment material containing < 50 ppm and that all results have been successful. Clariant should include any information pertaining to this reworking in this Application. For example, a discussion of the materials reworked, the procedure employed, and the pre- and post-reworking PCB analytical results should be included.

As a point of clarification, please be aware that a Consent Agreement and Final Order (CAFO) will need to be executed to return PCB-contaminated product from Mexico for purposes of "reworking". In addition, since the PCB-contaminated product currently stored at Clariant is unauthorized, the CAFO must be executed and include a reference to the Application or any workplan approved by EPA prior to "reworking" of this product.

Should you have any questions, please feel free to call me at (617) 918-1527.

Sincerely,

Kimberly N. Tisa, PCB Coordinator
Office of Ecosystem Protection/Chemical Management Branch

cc:

M. Milette, EPA √T. Olivier, EPA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 1

1 Congress Street, Suite 1100 BOSTON, MA 02114-2023

CERTIFIED MAIL

March 21, 2005

Michael A. Teague, Ph.D. Vice President / ESHA Clariant Corporation 4000 Monroe Road Charlotte, North Carolina 28205

Re:

Exposure and Screening-Level Risk Assessment for Carpet Fiber and Food Wrap Scenarios Associated with Pigment Red 144/214, February 2005

Dear Dr. Teague:

This is in response to your February 2005 Exposure and Screening-Level Risk Assessment for Carpet Fiber and Food Wrap Scenarios Associated with Pigment Red 144/214. EPA's contractor, Versar, has completed its review of this submittal. Versar's comments are attached.

EPA expects Clariant to make any necessary revisions to the comprehensive assessments as soon as possible. Accordingly, EPA requests that Clariant provide its estimated schedule for completion of the revised assessments within 7 days of receipt of this letter.

Should you have any questions, please call me at (617) 918-1527 or by e-mail at tisa.kimberly@epa.gov.

Sincerely,

Kimberly N. Tisa, PCB Coordinator

Office of Ecosystem Protection

CC:

T. Olivier, EPA M. Milette, EPA

attachment



MEMORANDUM

TO:

Laura Casey

cc:

11.1126.1000.001.01

FROM:

Diane Sinkowski, Jim Buchert

DATE:

March 18, 2005

SUBJECT:

Review of "Exposure and Screening-level Risk Assessment for Carpet Fiber and

Food Wrap Scenarios Associated with Pigment Red 144/214" (February 2005)

I have the reviewed the revised risk assessment and response to comments provided by Clariant, per the technical direction provided by EPA Region 1 on February 24, 2005, and have the following comments:

- 1. The volatilization factor, VF, calculated in this assessment is presented with the units of kg/m³. A unit analysis of 3 of the equations seems to contradict this.
 - In Equations 1 and 9, the VF needs to be in units of m³/kg, so that the inhalation factor can be added to the other factors in the denominator, which are in kg²/mg. This yields the correct units for the PCB concentration in carpeting, CNC_{carpet} of mg/kg.
 - In Equation 8, if the units of Cg are mg/m³, and the units of M are mg/kg, then the units of VF need to be m³/kg.
- 2. Where does room surface area fit into these calculations? Is a certain area incorporated in the empirical equation used (Equation 2)? Typically, when an air concentration is calculated from soil or groundwater, the area of the source needs to be know and is incorporated into the calculation because a larger area results in a higher concentration.

Please feel free to contact me if you have any questions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 1

1 Congress Street, Suite 1100 BOSTON, MA 02114-2023

CERTIFIED MAIL

January 25, 2005

Michael A. Teague, Ph.D.
Vice President / ESHA
Clariant Corporation
4000 Monroe Road
Charlotte, North Carolina 28205

Re:

Exposure and Screening-Level Risk Assessment for Carpet Fiber and Food Wrap Scenarios Associated with Pigment Red 144/214, December 6, 2004

Dear Dr. Teague:

This is in response to your December 6, 2004 Exposure and Screening-Level Risk Assessment for Carpet Fiber and Food Wrap Scenarios Associated with Pigment Red 144/214. EPA's contractor, Versar, has completed its review of this submittal. Versar's comments are attached.

EPA expects Clariant to make any necessary revisions to the comprehensive assessments as soon as possible. Accordingly, EPA requests that Clariant provide its estimated schedule for completion of the revised assessments within 7 days of receipt of this letter.

Should you have any questions, please call me at (617) 918-1527 or by e-mail at tisa.kimberly@epa.gov.

Sincerely,

Kimberly N. Tisa, PCB Coordinator

Office of Ecosystem Protection

CC:

T. Olivier, EPA M. Milette, EPA

attachment



MEMORANDUM

TO:

Laura Casey

cc:

Jim Buchert

11.1126.1000.001.01

FROM:

Diane Sinkowski

DATE:

January 23, 2005

SUBJECT:

Review of "Exposure and Screening-level Risk Assessment for Carpet Fiber and

Food Wrap Scenarios Associated with Pigment Red 144/214" (December 6, 2004)

I have the reviewed the submitted risk assessment and have provided, below, comments addressing the items specified by EPA in the technical direction provided by Region 1 on 12/20/04.

1. Does the *Exposure Assessment* consider all pathways for the uses included in the assessment? If not, please provide comments and/or recommendations. Please include Versar's justifications using appropriate EPA procedures and guidance.

The pathways considered seem appropriate for the exposure scenarios evaluated.

2. Were Versar's October 25, 2004 comments adequately addressed in the *Exposure Assessment?* If not, please provide comments and/or recommendations. Please include Versar's justifications using appropriate EPA procedures and guidance.

Versar's previous comments have been adequately addressed.

- 3. Are there areas where data gaps exist and where additional information is required? Versar shall identify any data deficiencies, and if found, provide possible resolutions such as (but not limited to) the collection of additional samples or requesting additional information.
- On page 2-5, the risk assessment indicates that a soil dust ingestion rate of 55 mg per day was assumed for children and is based on data from Moya et al. (2004). I was unable to find this value in the cited reference. The Moya et al. reference states the following:

Children's mean soil ingestion values ranged from 39 mg/day to 271 mg/day with an average of 138 mg/day for soil ingestion and 193 mg/day for soil and dust ingestion. Upper percentile values average 358 mg/day for soil and 790 mg/day for soil and dust combined.

Could Clariant please provide clarification on the origin of the assumed value?

- Clariant should provide information regarding exposure frequency and duration for the food wrap scenario and revise the calculations shown at the bottom of page 3-2 accordingly, since the calculations only reflect one day's consumption of cheese. In particular, for carcinogenic risk, the calculated daily dose shown, 0.0000014 mg tPCBs/kg BW/day, cannot be compared to the target lifetime average daily dose of 0.000014 mg/kg BW/day (Table 1) without dividing by the lifetime averaging time (i.e., 25,550 days).
- Table 1 (page 7-1) of the risk assessment indicates that a slope factor of 0.07 (mg/kg-d)⁻¹ was assumed for calculating the cancer risk from ingestion, dermal absorption, and inhalation of PCBs. The value is the upper-bound slope factor for PCBs of the lowest risk and persistence. EPA's criteria for use of this slope factor (www.epa.gov/iris/subst/0294.htm) is that congener or isomer analyses verify that congeners with more than 4 chlorines comprise less than 1/2% (0.5%) of total PCBs. Page 1-2 (bottom paragraph) of the risk assessment indicates that PCB congeners 44 and 70 make up approximately 90 percent of the total PCBs found in Pigment Red 144 and 214. It is uncertain from this statement whether the additional PCB congeners in the pigments are of low chlorine content. Clariant should demonstrate to EPA that the composition of the pigments meets EPA's criteria for use of the 0.07 (mg/kg-d)⁻¹ slope factor.
- 4. Are the formulas provided in the *Exposure Assessment* appropriate and are the proposed exposure/risk model input parameters correct? If not, please provide comments and/or recommendations using appropriate EPA procedures and guidance.
- According to the risk assessment, Equation 4 (page 2-3) is obtained by substituting Equation 3 into Equation 2 (both on page 2-2), and solving for C_g (room air concentration of tPCB vapor). Equation 4 (without the parameter "D") is as follows:

$$C_{g} = \left(\frac{d_{w} \times 10^{3.83 \cdot 0.62 \times \log VP}}{M}\right)$$

However, as shown in the steps below, the substitution has not been performed correctly:

Given:
$$K_{SA} = \frac{\frac{k_s}{k_d}}{d_w} = 10^{3.82-0.62 \times logVP}$$

and

$$\mathbf{K}_{eq} = \frac{\mathbf{k}_{s}}{\mathbf{k}_{d}} = \frac{\mathbf{M}}{\mathbf{C}_{g}}$$

Substituting for $\frac{k_s}{k_d}$:

$$K_{SA} = \frac{\frac{M}{C_g}}{d_w} = 10^{3.82 \cdot 0.62 \times logVP}$$

Rearranging to solve for C_g:

$$C_g = \frac{\frac{M}{10^{3.82-0.62 \times logVP}}}{d_w} = \frac{M}{d_w \times 10^{3.82-0.62 \times logVP}}$$

This correction should be made and any calculations performed using this equation should be revised.

- The parameter M, as defined in the risk assessment, is incorrect. Table 1 (page 7-1) of the risk assessment indicates that M is the carpet area mass (face weight; mg/m²). The parameter M, as defined in the Bennett and Furtaw (2004) and the Won, et al. (2000) papers, is the mass of the compound [PCBs] collected on the sink [carpeting] per unit area (mg/m²). Therefore, the value shown in Table 1 for the carpet area mass and the calculated air concentration in an enclosed space 7 days post installation of a new carpet are incorrect, unless Clariant means to assume that the entire mass of the carpet is tPCBs.
- Equation 5 from the risk assessment (see below), has parameters representing the tPCB concentration in the carpeting (CC_{Carpet}) and the concentration in the air (C_g). There cannot be two concentration parameters in the equation. When a unit analysis is done, one can see that the ingestion and dermal absorption parameters cancel to mg/kg as they should, since the equation is being solved for CC_{Carpet} which is in units of mg/kg. However, when the units for the inhalation contribution to the equation are canceled, the term is unitless instead of being mg/kg. Equation 5 and the calculations for CC_{Carpet} should be revised.

$${\rm CC}_{_{\rm caspet}} = \frac{{\rm TR} \times {\rm BW} \times {\rm AT}_{\rm e}}{{\rm ED} \times {\rm EF} \times \left[\left(\frac{{\rm CSF} \times {\rm IR} \times {\rm BioAF}}{10^6 \ {\rm mg} \ / \ {\rm kg}} \right) + \left(\frac{{\rm CSF} \times {\rm SA} \times {\rm AF} \times {\rm DERM}}{10^6 \ {\rm mg} \ / \ {\rm kg}} \right) + \left({\rm CSF} \times {\rm IHR} \times {\rm C}_{\rm g} \times {\rm VRF} \right) \right] }$$

$$CC_{\text{curper}} \text{ (inhalation term only)} \left(\frac{mg}{kg} \right) = \frac{TR \times BW \times AT_e}{ED \times EF \times \left(CSF \times IHR \times C_g \times VRF \right)} = \frac{(-) \times (kg) \times (days)}{(yr) \times \left(\frac{days}{yr} \right) \times \left(\frac{mg}{kg - day} \right)^{-1} \times \left(\frac{m^3}{day} \right) \times \left(\frac{mg}{m^3} \right) \times \left(-\right) } = (-) \times ($$

- A volatilization rate factor, VRF, is included in the inhalation exposure calculation. However, since the equation from the Bennett and Furtaw (2004) paper, already takes into account desorption of the compound (tPCBs) from the sink material (carpeting), a VRF should not be included in the calculation if the methodology from the Bennet and Furtaw paper is to be used to calculate a tPCB air concentration.
- A bioavailability factor, (assumed values were 1, 5, 10, 50, and 100%, see Table 1), was included in the calculation of the ingestion dose. Although EPA has studied and provided some guidance regarding the relative bioavailability of metals, such as lead, at this time, U.S. EPA has not provided guidance for PCBs. Until EPA reviews all the studies on PCBs and comes to a consensus regarding the relative bioavailability of PCBs in soil, no bioavailability factors should be included when calculating PCB intakes via the ingestion pathway.

Please contact me if there are any questions regarding these comments or if additional information is needed.

Clariant Corporation

4000 Monroe Road Charlotte, NC 28205 704.331.7000



Erin Russell Writer's Direct Dial No.: 704/331-7059

Fax No.: 704/331-7131 E-Mail: erin.russell@clariant.com

COMPANY SANITIZED
DOES NOT CONTAIN TSCA CBI

August 20, 2004

Thomas T. Olivier
Senior Enforcement Counsel
EPA New England, Region 1
1 Congress Street, Suite 1100 (SEL)
Boston MA 02114-2023

Re:

Clariant Corporation
Request for return of pigment

Dear Mr. Olivier:

Please find attached a spreadsheet with information on the shipments to	
. I have included information that groups the inventory by shipment in the	last
column. Based on our delivery records it appears that the product can be grouped into four	
shipments. I have highlighted in yellow the current inventory	
. The inventory exists as either dry powder or presscake.	

Clariant is claiming as Confidential Business Information

I have redacted the spreadsheets accordingly.

I hope this information is responsive to your request. Please let me know if you have any questions regarding this submittal.

Sincerely,

Erin Russell

Russell

c: Mike Teague John Paul med were NAT I Recommend to the Recommend of the Recommen

Clariant Red Pigment xxxxxxx			
Product	batch number	PCB (PPM)	Delivery#
Red 214	US62313811	493	xxxxxxx 4800
Red 214	US62313813	296	pounds dry
Red 214	US62313814	532	basis
Red 214	62313816	694	
Red 214	62313817	249	
Red 214	USEA000221	171	
Red 214	USEA000222	382	
Red 214	USEA000223	183	xxxxxxxx
Red 214	USEA000372	180	12691 pounds
Red 214	USEA000373	246	dry basis
Red 214	USEA000374	304	
Red 214	USEA000375	229	
Red 214	US62253712	255	
Total Red 214			
Red 144	US62254103	606	
Red 144	US62313707	. 590	XXXXXXXX 4990
Red 144	USEA000232	240	pounds dry basis
Red 144	USEA000233	501	
Red 144	USEA000234	475	
Red 144	USEA000235	101	xxxxxxxx 5956 pounds dry basis
Red 144	USEA000238	100	
Red 144	USEA000239	35	
Red 144	USEA000240	99	
Total Rec 144	100000000000000000000000000000000000000		

- cale #

COMPANY SANITIZED
DOES NOT CONTAIN CBI

gellow cells

Red Here?

Clariant Corporation

11100

4000 Monroe Road Charlotte, NC 28205 704.331,7000



Erin Russell Writer's Direct Dial No.: 704/331-7059 Fax No.: 704/331-7131 E-Mail: erin.russell@clariant.com

COMPANY SANITIZED
DOES NOT CONTAIN TSCA CBI

August 20, 2004

Thomas T. Olivier
Senior Enforcement Counsel
EPA New England, Region 1
1 Congress Street, Suite 1100 (SEL)
Boston MA 02:114-2023

Re:

Clariant Corporation

Request for return of pigment

Dear Mr. Olivier:

Please find attached a spreadsheet with information on the shipments to

I have included information that groups the inventory by shipment in the last column. Based on our delivery records it appears that the product can be grouped into four shipments. I have highlighted in yellow the current inventory

The inventory exists as either dry powder or presscake.

Clariant is claiming as Confidential Business Information

I have redacted the spreadsheets accordingly.

I hope this information is responsive to your request. Please let me know if you have any questions regarding this submittal.

Sincerely,

Erin Russell

c: Mike Treague

Clariant Red Pigment xxxxxxx				
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Red 144	USEA000238	100		
Red 144	USEA000239	35		
Red 144	USEA000240	99	Dasis	
Total Red 144				
Yellow cells show	current inventory			

COMPANY SANITIZED DOES NOT CONTAIN CBI